

REMARKS

By the present amendment, independent claim 1 has been amended to further clarify the concepts of the present invention. In particular, claim 1 has been amended to incorporate the subject matter of dependent claim 4 therein. Consequently, dependent claims 4 and 9 have been canceled. Entry of these amendments is respectfully requested.

In the Office Action, claims 1-12 were rejected under 35 USC § 102(b) as being anticipated by, or alternatively, under 35 USC 103(a) as being obvious over, the patent to Chatterjee. In making this rejection, it was alleged that the Chatterjee patent teaches a resin composition for metallized films formed of components which fall within the scope of the noted claims, particularly citing the disclosure at line 21 of column 2 to line 55 of column 4. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. The subject invention relates to a polypropylene-based resin composition for metallized films where the composition comprises, among other things, a propylene random copolymer (A) produced in the presence of a metallocene catalyst, which has the properties (a-1) to (a-5) as recited in claim 1. An extremely important feature of this composition is that the propylene random copolymer (A)

(hereinafter simply referred to as "copolymer (A)") is produced in the presence of a metallocene catalyst. In other words, it is extremely difficult, if not impossible, to produce the copolymer (A) without using a metallocene catalyst, that is, for example, in the presence of a Ziegler-Natta type catalyst. It is submitted that such a polypropylene-based resin composition for metallized films which includes copolymer (A) is not taught or suggested by the cited patent to Chatterjee.

More particularly, it is submitted that the Chatterjee patent does not teach or suggest, among other things, the use of a metallocene catalyst for the production of a propylene random copolymer. In support thereof, attention is directed to column 2, lines 4 to 9 of the Chatterjee patent which teaches:

"For example, the base polymer may be prepared by polymerizing propylene and an α -olefin having 5 to 8 carbon atoms under polymerization conditions in the presence of a titanium-based, olefin polymerization catalyst system such as a magnesium halide-supported titanium-containing polymerization catalyst system."

Attention further is directed to column 3, lines 23 to 26 of the Chatterjee patent which teaches:

"Acid acceptors act to neutralize acidic species, such as hydrochloric acid (HCl), which are residues from the polymerization catalyst system such as the Ziegler-Natta type catalyst system."

These two teachings from the Chatterjee patent strongly suggest that a Ziegler-Natta type catalyst is used for producing the propylene random copolymer. Therefore, in the Chatterjee patent, the amount and molecular weight of the solubles of the propylene random copolymer are not well-balanced, so that the properties of the resultant metallized film are unsatisfactory.

In the rejection, it was acknowledged that the Chatterjee patent does not specifically disclose that the propylene random copolymer of the composition according to the patent has all the properties (a-2) through (a-4) as recited in the subject claims. However, it was asserted that the components of the resin composition of the cited Chatterjee patent would be expected to possess the same properties as recited in the claims. In other words, it was asserted that the components of the composition of the cited Chatterjee patent would inherently have the same properties as the composition as claimed.

It is submitted that evidence contained in the subject specification demonstrates that the propylene random copolymer of the composition according to the Chatterjee patent does not in fact have one or more of the properties as claimed. In this regard, specific

attention is directed to Comparative Examples 9 to 12 (see page 42, lines 1 to 4, page 42, line 9 to page 43, line 3, Table 3 appearing at page 44 and Table 4 appearing at page 45 of the present specification), in which a propylene random copolymer is produced in the presence of a Ziegler-Natta type catalyst (see also page 34, line 6 to page 36, line 15 of the present specification). From these Comparative Examples, it is to be specifically noted that the amount and molecular weight of the solubles (at 20°C and 40° C) are not well-balanced, so that the properties of the resultant metallized film are unsatisfactory. These Comparative Examples clearly demonstrate the importance of the use of a metallocene catalyst in the production of copolymer (A).

Further, it should be noted that the production of a propylene random copolymer in the presence of metallocene catalyst does not always give copolymer (A). In fact, in Comparative Example 13 as set forth in the subject specification, although the propylene random copolymer is produced in the presence of a metallocene catalyst (see page 36, line 16 to page 37, line 12 of the present specification), the resultant copolymer has a polydispersity index (PI) of 2.2 (smaller than the PI of copolymer (A)). As a consequence, the properties of the resultant metallized film are unsatisfactory (see page 42, lines 1 to 4, page 43, lines 4 to 8, Table 3 appearing at page 44 and Table 4 appearing at page 45 of the present specification).

As apparent from the above, the production method and properties (especially PI)

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of copolymer (A) of the polypropylene-based resin composition for metallized films of the presently claimed invention must be specified as in claim 1, in order to obtain a metallized film with satisfactory properties. In this regard, attention is directed to page 7, line 26 to page 8, line 3 of the present specification which states:

"The copolymer satisfying the PI limitation means that it has a molecular weight distribution index in a specific range, and has a broader molecular weight distribution than the conventional one having a narrow distribution, which is one of the characteristics of the polymer produced in the presence of metallocene catalyst."

This disclosure clearly demonstrates that the properties of copolymer (A) according to the presently claimed invention are not typical and therefore are not obvious from the Chatterjee patent. Thus, it is submitted that the Chatterjee patent does not teach or suggest the essential features and unexpected effects of the presently claimed invention.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a) and allowance of claims 1-3 and 5-12 as amended over the cited Chatterjee patent are respectfully requested.

In view of the foregoing, it is submitted that the subject application is now in

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condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP



Donald W. Hanson
Attorney for Applicants
Reg. No. 27,133

Atty. Docket No. 030918
1725 K Street, N.W. Suite 1000
Washington, D.C. 20006
(202) 659-2930
DWH/nk



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